



The Carolina DX Association

W4VHF	Ted Goldthorpe	President
N4HN	Tom Wright	Vice-Pres.
W3ZL	Cliff Wagoner	Sec.-Treas.
K4MD	Joe Simpkins	Cluster Mgr.
W3GQ	Paul Sturpe	Assoc. Cluster Mgr.
WB4BXW	Wayne Setzer	Webmaster
K8YC	John Scott	Editor

The Pileup

Newsletter of the CDXA

Andaman Island Travelogue by AA4NN

Joe Blackwell, AA4NN took lots of pictures of the Andaman Islands (VU4) during his recent trip to this rare Indian Ocean DXCC entity. Joe will share his story and photos with CDXA members on August 3rd. Admission price is your favorite potluck entrée and a side dish.

What:	Andaman Island "Travelogue" by Joe Blackwell
When:	Thursday, August 3, 2006
Time:	Social Hour 6:30 to 7:00PM Potluck Dinner 7:00PM, program after dinner.
Where:	St. Andrews Episcopal Church Activities Building 3601 Central Avenue Charlotte, NC [Check with K4DXA or Mapquest if you need directions]
Beverages:	BYO wine and/or beer (no liquor, please), soft drinks by CDXA.
Food:	Potluck—bring an entrée/meat dish for four and a side/salad. (Purchased items are fine!)
Miscellany:	CDXA will provide soft drinks and bottled water.

RSVP to Thomas Wright (twright@carolina.rr.com) at 704-536-9117 for planning, drink and seating needs. Any questions about this event may be directed to Thomas, also. A limited number of interested, non-member guests may be accommodated. Please check with Thomas (N4HN) for arrangements and space availability.

CDXA PacketCluster & Other Communication Systems		
W4DXA (11 mi. NE of Mooresville)	144.93 MHz (1200 bits/second)	441.00 MHz (9600 bits/second)
K4MD Charlotte, NC	144.91 MHz (1200 bits/second)	Not Available on 9600bits/second
NG4DX (Digi near Galax, VA)	144.95 MHz (1200 bits/second) Connect to NG4DX, then type "C W4DXA"	
K4MD (AR Cluster via Telnet)	k4md.no-ip.com	
CDXA Repeater 147.18 MHz (+600)	W4DXA, Near Fort Mill, SC	
World Wide Web Homepage	www.cdxa.org	
Wednesday Luncheon (11:30 AM)	Shoney's, 355 Woodlawn Road, Charlotte, NC (704-525-4395)	

“Wow, We’re All Getting Older!”

How many times have you heard that comment at an amateur radio event? The very next question is, “Where are the new hams going to come from?” With electronic games, cellphones, Blackberry’s, Personal Computers, and the like, there are countless diversions for today’s youngster. How do we pass along the excitement that we’ve all felt from throwing one’s voice into the “ether” and having someone come back to talk to us. It sure is better than text messaging on your cellphone, and a lot less expensive! Also, we meet some wonderful folks that way who often become lifelong friends.

As one of a number of CDXA members who volunteer at Discovery Place, I can assure you that young people do find amateur radio interesting once they become aware of its magic. But, how do we do an outreach to the young folks? Our own national organization, The **American Radio Relay League**, is doing just that through the **Education and Technology Program**. You’ve probably heard this program called “The Big Project” in its more familiar name. This program offers grants and educational workshops for teachers who wish to introduce a unit on radio education into their curricula, and its working!

I urge you to go the ARRL website and in the “search” box, type “Education and Technology Program”. There you will find model curricula to help the teacher with all aspects of developing an informative and interesting program to teach students about radio and radio technology. We should be proud that our national organization has

put together such an outstanding resource for our educators.

Where does the money come from? From hams like you and me who send donations to the Education and Technology Program of ARRL. If you’d like to help ensure that ham radio is around for your grandchildren and great grandchildren, then support the Education and Technology Program. How do you do that? Go to the ARRL homepage and in the banner line in the header, click on “Donate To ARRL”. It couldn’t be easier.

Welcome New Member

You’ll recall that the winner of CDXA raffle at the last two Charlotte Hamfests is **William LaMay (K3RMW)**. William now has a neat little generator and a world clock at his residence to show for his “investment” in our raffle. I guess William decided to “put a little back into the till” after his rather unusual successes of the past two years. Therefore, we welcome William LaMay as new member of the Carolina DX Association. William lives in Matthews, NC and is with the Mecklenburg County Fire Marshall’s Office. We hope to have William find the time to join us at Shoney’s sometime soon so we get to know him before he enters next year’s raffle again!!

Use ‘em or Lose ‘em—IRCs, That Is!

In case you didn’t notice, or you haven’t been reading the various DX Newsletters, the International Reply Coupon which was adopted in 1999 will cease to have value after December 31, 2006. Yes, printed in fine print on the back of the present IRC is the notice that no member of the Universal Postal Union is obligated to accept this IRC in exchange for postage after that date. Many will recall that the predecessor of the current IRC continued to be exchanged by some postal authorities for a while after it was superceded. The new version should be available beginning in July, 2006, and it carries an expiration date of 31 December 2009.

The new version, dubbed Beijing Model No. 2 was designed by a Ukrainian professional graphic artist. The theme of the new IRC—“The Postage Stamp – a vehicle for Communication”—is carried through the design in a backdrop on the coupon showing the uplifted hand of God about to touch that of Adam as depicted in

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The Pileup

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Published monthly 10 times per year, excluding the months of June and December.

The purpose of the association is to secure for the members the pleasures and benefits of the association of persons having a common interest in Amateur Radio.

Members of the CDXA shall adhere to “The Amateur’s Code” as published from time to time in *The ARRL Handbook for Radio Amateurs*, and shall consist of those valid licensed amateur operators having an interest in promoting amateur radio. Long distance communications (DX) is of special interest to members of the association, but said interest is not a requirement of membership.

Dues are \$30 per year for those using the PacketCluster maintained by the Association, \$15 otherwise, payable each January. Dues are payable by check to the Secretary/Treasurer:
Cliff Wagoner, W3ZL
P. O. Box 577
Davidson, NC 28036

Address, telephone, and email address changes should be directed to the Secretary/Treasurer at the above address or via email at: cliffw@adelphia.net.

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Michaelangelo's "The Creation" fresco adorning the ceiling of the Sistine Chapel in Rome. A hologram like that found on many credit cards will be used to protect the instrument from being counterfeited.

If you have a stash of the current IRCs at home, you'd best get all caught up with your QSLing chores so you can be assured that your IRC will get you a confirming QSL in return.

Josh Fisher, W4WJF, Awarded Scholarships

Josh Fisher, W4WJF, currently a sophomore at NCSU majoring in Computer Engineering and Electrical Engineering, has received two Amateur Radio scholarships for the 2006-2007 academic year. He was awarded the Northern California DX Foundation scholarship, and the Ten Ten International Scholarship. Josh was recently awarded the North Carolina Society of Engineers, Ronald C Harrell scholarship. Josh is currently ranked #1 out of his class of 3972 students.

Take Time to Smell the Roses

By John Scott, K8YC

Chasing DX can easily become an obsession. Fortunately, the low points of the solar cycle provide some relief from this compulsive obsessive behavior. "Now, what can I do?", you might be asking.

At the CDXA Charlotte Hamfest dinner, one of the door prizes was a copy of the ARRL-published book, YASME. The original recipient wasn't particularly interested in the book, but I had intended to purchase it at Dayton but never made the move. So, a price was agreed upon which was good for both parties. For the next few weeks, I was rapt in the interesting history of amateur radio which was largely unknown to me. I highly recommend finding a copy of YASME and reading it.

Most of the oldtimers "radio active" in the late 1950s through the 1980s can tell you of the exploits of Danny Weil and Lloyd and Iris Colvin. Danny was quite active from 1958 until about 1963—the same time I was heads-down earning a Bachelor's Degree in Electrical Engineering. I wouldn't become a ham until 1979, even

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CDXA VHF Contesters — July 15-16

Some excitement is in store for you this VHF contest season. It also should be an exciting time for **Ted and Itice Goldthorpe**. Last April's issue of CQ Magazine has a picture of Ted at Dayton in 2005 receiving his **fifth consecutive first place finisher award** as a Rover in the CQ July 2004 VHF contest. But the caption on the picture tells us that Ted and Itice also won the Rover Title in 2005 for his **sixth consecutive title**. Here we are in July 2006, and Ted and Itice will be at it again to see if seven is a lucky number.

The Goldthorpe Rover Team will go all out to defend their title. Here's how their roving schedule lines up:

July 15	2PM to 7PM	Roan Mountain (EM86)
July 16	8AM to 1PM	Mt. Mitchell (EM85)
July 16	2PM to 5PM	Blue Ridge Parkway (EM96 & EM95)

This is a two band contest. Look for Ted as follows:

50.125-50.200	SSB/CW
144.150-144.250	SSB/CW
146.490	FM simplex

Each CDXA member could conceivably give Ted 8 QSOs—two bands x four grids.

Another CDXA pair—**Bill and Josh Fisher**—will be participating in the CQ July VHF Contest from a mountaintop near Boone. I understand Bill will be taking one band and Josh the other. **Josh won the 2 Meter Single Operator title in the 2005 contest.** For their fixed location, each CDXA member could give them at least two QSOs.

The club will put out a bulletin on July 13 or 14 if any other contestants from CDXA make their plans known. Support CDXA's VHF testers and propel them to victory.

Additional Editor's Role for K8YC

If you check out the masthead on the INDEXA newsletter, you'll find John Scott (K8YC) has taken on the editor's duties for INDEXA. John fielded his first issue in April with a report on the recently completed Peter I DXpedition. So, four times per year, he'll "double up" with his editorial duties for CDXA.

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though I helped one of my best high school buddies build and erect a cubicle quad in the mid-1950s. Lloyd and Iris were quite active from the mid-1960s right up to the early 1990s. Both parties gave a lot of new DXCC entities to many of the old timers. Danny had several sailboats—all with the name YASME. Several of these boats met their untimely demise on rocks or by fire at the most inopportune times. As I read this marvelous history, I am amazed that all this history was floating by me in the form of RF, but my “receiver” wasn’t tuned to it. Fortunately, The YASME Foundation, which was funded by Lloyd and Iris, still supports amateur radio DXpeditions to this day. The foundation felt it appropriate to capture the history of Danny Weil and the Colvins, and commissioned a writer to record this wonderful period and the personalities of amateur radio of that era. I am certainly glad it did as my understanding of amateur radio is richer for the experience.

Danny was an English watchmaker who got the wanderlust. He decided he wanted to circumnavigate the world in a sailboat. Starting with a derelict sailboat for transportation, Danny spent several years making it seaworthy. He soon became aware of the benefit of having a radio to enable communications when offshore, and the rest, as they say, “is history”. Having arrived in the “new world” in the Caribbean, Danny found that Amateur Radio might serve as a means to an end in providing support for his planned circumnavigation as well as giving hams all over the world the opportunity to work “new ones”. YASME traces Danny’s ups and downs while seeking his dream.

The Colvin’s story runs parallel to Danny but on an entirely different path. Lloyd was a graduate of the California university system as an electrical engineer and was very active in the U.S. Army Signal Corps during WW II. Iris soon caught the bug and during his Army Career, Lloyd and Iris operated from many of Lloyd’s military stations to become noted DXers. After retirement from the Army, the Colvin’s started a very successful building business which eventually gave them the financial resources to pursue their true love. On each of Lloyd and Iris’ many DXpeditions they managed to earn DXCC status from the countries where they operated. There is probably nobody that comes close to this day at possessing DXCC certificates from as many entities.

In recording the history, the author of YASME usually cited the first and last contacts in each of the Colvin’s venues. Surprisingly, I noted that CDXA’s own Larry Sossoman, K4CEB, had the distinction of being the last one in the log on the Colvin’s DXpedition to Ghana in the mid-1980s.

The book does not solely deal with Danny Weil and the Colvins. Other mainstay names of amateur radio—Dick Spencely and Don Wallace (W6AM)—drift in and out of the historical narrative. I’m sure all, even those radio active during this period will treasure reading YASME.

After reading the book, the name Don Wallace (W6AM)—an early Member of the CQ DX Hall of Fame—came to my attention in a different context. There are several wonderful articles on Don’s outstanding antenna farm formerly in an area southwest of downtown Los Angeles. His 14 huge rhombic antennas have been disassembled from their location on some of the highest priced real estate in Southern California, but while operational, Don was one of few on the West Coast who could “work ‘em all”. He was loud everywhere in the world. If you’d like to learn a little more about Don’s world, enter “W6AM” into GOOGLE and read the many entries. You won’t be disappointed.

If you still thirst for more historical content, go to the Potomac Valley Radio Club website and look at the June 2006 issue of their newsletter. There, Fred Laun, K3ZO, fills us in on his days in the Foreign Service in Thailand. Don’t be surprised in Fred’s narration to find the name of—you guessed it—Don Wallace (W6AM)! I am happy to say that Roger Burt, N4ZC, introduced me to Fred in my first trip to Dayton in 2002. Fred can tell you stories that will curl your hair about his Foreign Service days. It is wonderful that he’s sharing his experiences with us hams. In the June 2006 newsletter, you’ll learn how Fred helped to get Thailand off off the “ITU Banned List”!

In last issues of the Pileup, I mentioned “The Wayback Machine” (<http://www.ham-shack.com/history01.html>). This historical record of amateur radio is yet another way to become more conversant on the hobby we all enjoy so much. So, don’t despair while “Ole’ Sol” decides when to awake once again. Start reading and enrich your enjoyment of the amateur radio experience.

Field Day 2006—Time Will Tell

Field Day 2006 is now over, and CDXA increased its score and QSO count for the third straight year. Dick Williams (W3OA) and XYL Ida opened their home for a repeat of our 2E entry of earlier years. Dick labored to put together a wonderful antenna farm to support the effort.

CW operators consisted of Roger Burt (N4ZC), Joe Blackwell (AA4NN), Chuck Gray (W4GMY), and Ron Bailey (AA4S). It is told that Lou Deitrich (N2TU) was an able-bodied standby CW operator, but he couldn't get AA4S and AA4NN out of the driver's seat!!

The SSB contingent was composed of Jim Miller (K4SQR), Joe Simpkins (K4MD), Rick Porter (AA4SC), Wayne Starnes (KU4V), John Scott (K8YC), Dick Williams (W3OA), Bob Burton (N4PQX), Ken Boyd (K4DXA), and Thomas Wright (N4HN).

Antennas erected were: 20 meter monobander for CW, 40m Dipoles for each of CW and SSB, phased 40m verticals (thanks K4SQR), a 160m dipole, an 80 meter dipole for CW and an 80m "lazy-H" for SSB. W3OA's tower provided stacked tribanders which were split to provide antennas for each of the two modes being used. ICE filters provided by Chuck Gray minimized interstation interference.

QSO count on CW was 1163, and QSO count on SSB was 1266. Point total including our optional bonus points was 7754. Discussion with other entrants indicate everyone felt they did better this year than last year, so it is impossible to predict whether our position will improve over last year's finish. Through this year's and earlier Field Day activities the amateur radio community indicated by another fine showing that it is both ready and able to conduct emergency communications if needed.

Member Milestones

Roy Lincoln, WA4DOU, wrote to tell us that he recently reached several significant milestones in his DX quest. Roy advises us that he will be honored with Certificate #1496 to confirm his obtaining the 5BWAZ award. He's also recently been advised that Certificate #563 will be coming his way for working all zones on 20 meters.

On the ARRL front, Roy also recently learned that he'll soon be receiving a certificate for earning his 5BDXCC Award. All of us who are pursuing these awards, or who have already earned them, are surely aware that these awards only come from a lot of hard work. Congratulations, Roy.



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Contesting Quietly Continues

One of the things that has always fascinated this writer about radio is that you can be walking down the street and there can be literally thousands of radio signals impinging your body and you don't have a clue that they are there without a receiver. Likewise, a few months can go by and dozens of CDXA members have been competing in contests and you don't have an idea unless one of them drops you a note identifying their successes. A while back I received a note from Ben Antanaitis (WB2RHM) telling me that he was the winner of the Low Power, Phone Only Class for North Carolina in the 2005 ARRL 10 meter contest. A little while before that Ben also told me that he had compiled the top score in the Single Operator/Low Power category of the 2006 ARRL RTTY Roundup for the Roanoke Division.

I decided to go to the ARRL website and check out how CDXA was doing in a few of the recently reported contests, and I was pleasantly surprised to find LOTS of CDXA members are regularly contesting, and I didn't even know it! Here's a quick rundown of participation:

2006 ARRL RTTY Roundup

WB2RHM	Ben Antanaitis	Top Score Single Op/Low Power
W3OA	Dick Williams	
N2TU	Lou Deitrich	
KS4S	Nyles McKeithan	

2005 ARRL 160 Meter Contest

AA4V	Steve Reichlyn	Participating for the Low Country Contest Club
AA4NN	Joe Blackwell	
WA4DOU	Roy Lincoln	
K4CEB	Larry Sossoman	
W3GQ	Paul Sturpe	
N4UH	"Uncle Henry" Ellwell	
KZ2I	Steve Sullivan	

2005 ARRL 10 Meter Contest

AA4NN	Joe Blackwell	
WA4DOU	Roy Lincoln	First, CW Only for NC
WB2RHM	Ben Antanaitis	First, Phone Only, Low Power for NC
W3ZL	Cliff Wagoner	
W3GQ	Paul Sturpe	
AD4IE	Paul Ponak	
KS4S	Nyles McKeithan	

Anybody say Contesting's Dead?

DXCC Challenge Standings as of 7/1/2006

Almost a year has gone by since we gave you a run-down on how CDXA members are faring in the DXCC Challenge. The arrival of the DXCC Yearbook reminded us that many are still accumulating "band countries" in the Challenge despite the decline of the solar cycle. Here's the latest list updated using the Challenge list as posted on the ARRL website as of July 1, 2006:

Jack Jackson	N4JJ	2952
Bill McDowell	K4CIA	2891
Gary Dixon	K4MQG	2881
Steve Reichlyn	AA4V	2463
Lou Dietrich	N2TU	2268
Bob Burton	N4PQX	2023
Steve Sullivan	KZ2I	1887
James Blythe	W4RDX	1425
John Scott	K8YC	1413
Kent Miller	K4MK	1309
Carl Smith	N4AA	1256
Chuck Gray	W4GMY	1211
Roy Lincoln	WA4DOU	1201
Nobby Mills	W4UFO	1160
Gary Colborne	N1GC	1147
Nyles McKeithan	KS4S	1117
Ed Swiderski	KU4BP	1098
Paul Sturpe	W3GQ	1022
Bill Tippet	W4ZV	1019

A position ranking is done in the 2005 DXCC Yearbook. The Challenge counts shown above represent a later point in time than that used for the Yearbook ranking. In the Yearbook our top four members ranked as follows: N4JJ (#20), K4CIA (#29), K4MQG (#34) and AA4V (#188). Well done, guys! We're sure there are a lot of CDXA members who have boxes of QSL cards by which they could move up well into the DXCC Challenge list. I can only presume that cards submitted to ARRL before the days of computerizing DXCC aren't in the Challenge count. Maybe that's your project until Ole' Sol wakes up again?

NC QSO Party Brings 'em Out

Results of the North Carolina QSO party have been released since the May 2006 issue of the Pileup was published, and we are happy to report individual CDXA members and club effort all fared well and helped to make the QSO Party a whole lot of fun for all that participated.

The CDXA club entry again operated from Discovery Place. CDXA was able to retain its title as winner of the In-State Club category again for 2006. In the final analysis, with the wonderful station setup at Discovery Place, we were able to outdistance our closest competitor by nearly a factor of three. The Dead Sea Scrolls exhibit was running concurrently at Discovery Place, and those awaiting their appointed time to enter the exhibit wandered into the radio room to find out all about radio contesting. At least 100 souls left Discovery Place knowing for the first time what a radio contest is all about and that ham radio is alive and well!

Dick Williams, Contest Manager for CDXA, picked up our winning trophy from the Forsyth Amateur Radio Club while in Dayton. The trophy is pictured below.



The trophy is being proudly displayed in the radio room at Discovery Place where it was won!

Other callsigns you'll recognize as CDXA members and who appeared high in the rankings are **John Covington, W4CC**, and **Roy Lincoln, WA4DOU**, who took 1st and 2nd place in the In-State QRP category.

The mobiles were out in force again. Reading through the soapbox comments, it appears as though the mobile operators plying the roads of North Carolina are a big draw for out-of-state entrants. After winning the mobile entry in 2004 and 2005, **Ron Bailey, AA4S**, took a membership in the Forsyth Amateur Radio Club, and

therefore was ineligible for a repeat win as a regular contestant. His "nemesis" of earlier years, NY4N, prevailed as winner of the In-State Mobile category with 113,240 points. Ron still proved he's "got it", however, as he completed the contest with the best overall total amongst ALL competitors of 134,216 points! Chasing AA4S in the mobile category and also as a member of Forsyth ARC was another familiar name from the member roles of CDXA—Ben Wasilauskas, K4GHS. Ben managed 71,904 points to give him the fourth best point total of all competitors in all categories. The mobiles really shined.

Besides those mentioned above, fellow CDXA members **Nyles McKeithan, KS4S**, and **Bill Turner, W4WNT**, were plying the airwaves to join in the fun.

The soapbox comments posted on the Forsyth Amateur Radio Club's website give a high level of praise for the mobile operations as well as generally very favorable comments across the board for the high level of participation across the state by North Carolina hams. In this second effort by the CDXA as an In-State Club Entrant, we'd have to agree that the Forsyth Amateur Radio Club puts on a good show. Hopefully you'll plan on joining in the fun in February, 2007.

Amateur Radio Ingenuity

By John A. Scott

In the May 2006 issue of The Pileup, I mentioned an article by Emil Pocock, W3EP, printed in the April 2006 issue of CQ Magazine regarding his investigations on the source of radio signal backscattering. Emil's investigative technique serves as an excellent example of amateur radio ingenuity at its best.

Emil's article begins with a short discussion of the phenomenon of backscattering. Over time, some sources have attributed backscattering to a volume of the ionosphere somewhere near the apex of the path where a radio wave is refracted back to the earth. Other sources have attributed backscattering to the earth's surface (often the ocean surface for transcontinental hops) which is found at the end of the first hop of a multihop path. Emil's interest in answering this question stems from the use of backscattering as a predictor for 6-meter openings to Europe. Without a whole lot of expensive equipment, how would one check each of the

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forgoing hypotheses for validity???

Emil and his companion in the study decided that some of the software designed for use in short duration meteor scatter communications could serve as a source for pulsed radio signals, not unlike a radar. Then, the issue becomes: How can the receiver be enabled to look for a short echo without desensitizing from the outgoing pulse? The answer was to put a second receiver about 90 miles behind the pulsed transmitter such that it could hear both the outgoing pulse without undue desensitization and yet be operational to discern the echoed pulse from the source of the backscatter. Then, if both outgoing pulse and returning pulse could be observed, a little mathematics would provide an indication of the distance to the point where backscattering occurred. For this author, the ingenuity shown by the investigators to use readily available meteor scatter software as a source for very short pulsed radio signals, the use of a second, remote receiver, and the use of computer software to validate that the investigators were measuring the correct return pulse represents critical thinking at its best.

What did Emil find? The study showed that (at least for signals directed at Europe from the Northeast) the source of backscattering was indeed the ocean surface. If that is the case, why then isn't 6-meters always open to Europe when backscattering is first heard—especially since suitable MUF values should be moving westward with the Sun's travel, and locales east of where the backscatter is produced should be able to support the desired propagation. As any good investigator should do, Emil set out to explain that apparent anomaly. The answer derived from near real-time MUF data available on the world wide web is that the required higher MUF values east of the backscatter points do not always develop in the manner we think they do. But, at least now we know where the backscatter occurs. When the next ingenious ham figures a way to find the MUF for the second hop, we'll all be working 6-meters to Europe with regularity!

DXCC Fees Increased by ARRL

After a number of years of price stability, the ARRL has announced an increase in the fees for DXCC. For a full rundown of all the fee options, check out the ARRL website (<http://www.arrl.org>). Below are the highlights for domestic member applicants. (International and non-

member applicants are higher.)

<u>Category</u>	<u>Fee</u>
First-ever Application (incl. cert. and pin)	\$12.00
Basic application (1 st in a calendar year)	12.00
Second and subsequent apps in a year	22.00
Reissue DXCC Certificate	12.00
Convention fee	7.00
In-Person fee (at ARRL HQ)	9.00

Note: Limit of 120 credits for each submission. \$0.15 for each additional credit. Return postage is extra.

Plaques:

#1 Honor Roll	\$55.00
Honor Roll	40.00
5BDXCC	40.00
DXCC Challenge	79.00

Note: Postage is additional for all plaques.

The Toolbox

By Don Daso, K4ZA

(Reprinted with permission of the Potomac Valley Radio Club)

This month, a slight departure, in deference to one Maryland Multi-Multi station owner's chastisement of my somewhat cavalier attitude to jolly old Sol, evidenced during last month's PVRC Field Day exercise.

To wit, ole Rundy Junior (aka K4ZA) was willingly about to set out to set up some of the AB-577 "rocket launcher" masts, when he was asked by said station owner what precautions he was taking for sun protection.

Having grown up on a farm in the Midwest, Junior admitted to never having taken such precaution once in his life. The folly or failure of this, along with the fallacy in such thinking, was fodder enough for said station owner, who quickly pointed out the lack of reasoning in a manner amazingly similar to something Mothers everywhere have used forever. Hence, some lotion was summoned, shared, and slathered on, whereupon we all then set out once more to act like real hams, albeit protected from the sun's damaging rays.

Which brings me to the point of this month's column. I'll admit to never giving a moment's thought to the sun's "other" action. Even after Frank Dowd, Charlotte's

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K4BVQ, pointed out to me that he had a mild case of skin cancer from too much exposure and was now taking extra precautions. I still operated outdoors with my boyhood mindset. But a few minutes searching and reaching on the Internet, those warnings, precautions, and preventative measures seem, to put it mildly, mere hints at the potential dangers from the Sun. Never mind 11-year cycles, or the effects on radio propagation—we're talking hazards from sunup to sundown, always possible and everywhere present.

Here are some somewhat sobering statistics: Over 90% of skin cancers are the result of too much sun exposure. Even though this cancer occurs in adults, the more serious skin cancers are caused by radiation damage (particularly the sunburns) that occurred during our childhood. And, there's plenty of evidence suggesting adult cataracts result from too much sun in the eyes during our childhood. Most of this damage is caused by UVB radiation, although UVA radiation can also be a factor. And, radiation risk has increased greatly over the past 20 years. Children suffer the highest risks. More than half of a lifetime's exposure to the sun happens during childhood! We all probably know that the lighter one's complexion, the greater the risk of sunburn. Remember that just like light, UV radiation reflects off snow, sand, water, cement, and even grass, increasing the potential for damage. So, even if you feel safer on a bright cloudy day, significant sun damage can still occur. The risk of developing malignant melanoma has more than tripled since 1980. That's jumped from one in 250 to one in 71. A person dies every hour from melanoma in the US! Skin cancer was once a disease of the middle-aged and elderly, but it's quickly becoming a disease of people in their 20s and 30s. Again, remember the damage that will result in melanoma happens during childhood. But who can imagine, or see or think 20 years in the future, when you're young?

When purchasing sunscreen, select a PABA-free brand with an SPF (sun protection factor) of at least 15. Typically, children's skin is thinner and more sensitive to the sun than adult skin, even in those individuals with darker complexions. The amount of sunscreen needed depends on how light the child's complexion. Most recommendations suggest using sunscreen with an SPF of 30 or greater for fair-skinned folks. Sunscreen is most effective if applied 20-30 minutes before exposure. Use sun-

screen whenever you expect to be in the sun at least 30 minutes or more. And sunscreens should be re-applied every 90 minutes or so, after having been in the water.

We often apply sunscreens to exposed areas of skin, such as the arms, hands, and face, but feel safe about areas under the clothes. Yet, ultraviolet radiation can penetrate clothing. Remember, that prolonged exposure can damage the skin. A typical cotton tee-shirt is the equivalent to SPF 7 protection. So, the solution for long outdoor days: sunscreen under the clothes, or sun-protective clothing. Sun protection depends on the fiber, weave, and fabric color. Sometimes a substance that blocks UV radiation is added to fabrics. The ultraviolet protection factor (UPF) of fabrics is similar to the SPF of sunscreens. A high UPF (40 to 50) is great. Wear and tear on the material, stretching, shrinking, laundering, all will affect the protection level.

Sunglasses do protect your eyes from harmful UV rays and decrease the risk of cataracts in adulthood.

Remember this simple Mom's mantra: *slip slap slop*.

Slip on some clothing—simply don't go out unprotected.

Slap on protective headgear—wear a hat. **Slop** on some protective sunscreen—follow the guidelines above.

So, forget tanning. Regardless of whether you think it makes you look good or not, the rewards aren't worth the risk. Despite lack of knowledge, or a cavalier attitude, this IS serious business, and one new tool in my collection is sunscreen. **Aloe UP, Pro 30** sunscreen is one such suitable product, with a nice feature—it will not sting your eyes. What's in *your* toolbox?? —**K4ZA**

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The Back Page

The **CQ July VHF Contest** will run July 15-16. Ted and Itice Goldthorpe (W4VHF/K4LVV) will be out trying to win their 7th consecutive CQ VHF Contest in the Rover category. Josh Fisher (W4WJF) and Bill (W4GRW) will be on top of a mountain near Boone, NC to see if Josh can repeat as the 2-meter single band winner in the same contest. Details are on Page 3, inside. Be sure to look for Ted and Josh and give them your QSOs.

On August 3, **Joe Blackwell (AA4NN)** will present a “travelogue” on the **Andaman Islands** using pictures he took on his recent visit there during the Andaman Hamfest. Details are on the Front Page.

The current issue of International Reply Coupons are only redeemable until December 31, 2006. See page 2 for details.

Reduced solar activity got you down? Then catch up on amateur radio history with some **summer reading**. Some ideas inside on Page 3. (See “Smell the Roses”)

Lots of good stuff inside on **member triumphs**. Applaud your buddies!

Success confirmed for the **2006 NC QSO Party**. See Page 7.

Good outing for CDXA for **Field Day 2006**. Now we wait. See Page 5.

DXCC fees increased. See page 8.

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